# AFFIDAVIT

STATE OF Georgia

COUNTY OF Fulton

BEFORE, ME, the undersigned authority, duly commissioned and qualified in and for the State and County aforesaid, personally came and appeared Jay M. Bradbury who being by me first duly sworn, deposed and said that:

He is appearing as a witness before the Alabama Public Service Commission in Docket. No. 29054 on behalf of AT&T Communications of South Central States, LLC., and if present before the Commission and duly sworn, his Rebuttal testimony would be set forth in the annexed testimony consisting of 26 pages and 2 exhibit (s).

Jay M. Bradbury

SWORN TO AND
SUBSCRIBED BEFORE ME
THIS 3rd DAY
OF March, 2004.

NOTARY PUBLIC

My Commission expires:

MARGARET A. PLASMAN
Notary Public, Gwinnett County, Georgia
My Commission Expires November 21, 2005

**BEFORE THE**
**ALABAMA PUBLIC SERVICE COMMISSION**

| | | | |
|---|---|---|---|
| RE: | In the Matter of Implementation of The FCC's Triennial Review Order (***Phase II – Local Switching for Mass Market Customers***) | ) ) ) ) ) | **Docket No. 29054** |

# REBUTTAL TESTIMONY OF JAY M. BRADBURY

## ON BEHALF OF

## AT&T COMMUNICATIONS OF THE SOUTH CENTRAL STATES, LLC

## MARCH 5, 2004

## PUBLIC REDACTED VERSION

**Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS AND POSITION TITLE.**

A. My name is Jay M. Bradbury. My business address is 1200 Peachtree Street, Suite 8100, Atlanta, Georgia 30309. I am employed by AT&T Corp. ("AT&T") as a District Manager in the Law and Government Affairs Organization.

**Q. ARE YOU THE SAME JAY M. BRADBURY THAT PREVIOUSLY FILED DIRECT TESTIMONY IN THIS DOCKET ON DECEMBER 23, 2003?**

A. Yes, I am.

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

A. My rebuttal testimony responds to portions of the direct testimony of BellSouth's witnesses W. Keith Milner, Pamela A. Tipton, Christopher Pleatsikas, Debra J. Aron, and John Ruscilli.

I have organized my rebuttal in sections around the following topics:

- Section I. The factual information about AT&T's deployment of local switches and network in Alabama reveals that AT&T does not meet the Triennial Review Order's ("TRO") qualifications to be considered a "trigger" candidate.

- Section II. AT&T's (and other CLECs') actual local switch and network deployment, serving the mass market, has been misrepresented in the ILEC's direct testimony.

- Section III. Knowledge of where CLECs are actually providing competitive choices to customers through the use of both UNE-P and UNE-L is vital to the commission's tasks in this docket.
- Section IV. The CLEC's ability to benefit by provisioning DSL services to its customers in Alabama is overstated by BellSouth's assumptions in its BellSouth Analysis of Competitive Entry ("BACE") model.
- Section V. Impairment caused by existing legacy network technology cannot be cured by improvements to the hot cut process – batch, bulk, or rolling.
- Section VI. Conclusion.

## I.
## THE FACTUAL INFORMATION ABOUT AT&T'S DEPLOYMENT OF LOCAL SWITCHES AND NETWORK IN ALABAMA REVEALS THAT AT&T DOES NOT MEET THE TRO'S QUALIFICATIONS TO BE CONSIDERED A "TRIGGER CANDIDATE"

**Q. PLEASE PROVIDE THE COMMISSION WITH A BRIEF DEFINITION AND OVERVIEW OF THE SIGNIFICANT DIFFERENCE BETWEEN MASS MARKET AND ENTERPRISE CUSTOMERS AS THE TERMS RELATE TO YOUR TESTIMONY.**

A. The significant difference for the purpose of my testimony is that mass market customers are served using analog DSO loops, while enterprise customers are served using DS1 and higher capacity loops, as noted in the TRO at paragraph 459 and note 1402:

> The mass market for local services consists primarily of consumers of analog "plain old telephone service" or "POTS" that purchase only a limited number of POTS lines and can only economically be served via analog DS0 loops.

Mass market customers are residential and very small business customers – customers that do not, unlike larger businesses, require high-bandwidth connectivity at DS1 capacity and above.

A more detailed description of the differences between mass market and enterprise customers can be found in the rebuttal testimony of CompSouth witness Joseph Gillan, also being filed today. For the purposes of my testimony, however, it is sufficient to divide customers served from CLEC switches into mass market or enterprise by classifying all customers served by analog DSO UNE loops as mass market customers and all others as enterprise customers.

**Q. PLEASE DESCRIBE AT&T'S LOCAL SWITCH AND NETWORK DEPLOYMENT IN ALABAMA THAT IS CAPABLE OF SERVING THE MASS MARKET.**

A. In Alabama, AT&T operates one (1) switch capable of providing service to mass market customers. The location and identification of this switch are shown in the following table.

| Switch Name | Switch CLLI |
|---|---|
| BIRMINGHAM | BRHMALPODS0 |

AT&T's local switch is, of course, dependent upon the deployment of collocation arrangements as discussed in my direct testimony and the direct testimony of BellSouth's witness W. Keith Milner. A collocation arrangement to serve an individual customer in an ILEC wire center may consist of either EELs and collocations or collocations alone. In Alabama, AT&T currently has no EELs serving mass market customers and has collocations capable of serving mass market

customers in only **BEGIN CONFIDENTIAL** ** [redacted] ** **END CONFIDENTIAL** out of 145 BellSouth wire centers.

**Q. IS THERE A DISTINCTION BETWEEN SWITCHES BEING MASS MARKET CAPABLE AND ACTUALLY SERVING THE MASS MARKET FOR PURPOSES OF THE TRO SWITCHING TRIGGER ANALYSIS?**

A. Yes. To satisfy the TRO "trigger" test, a CLEC must actually be serving mass market customers with its own switch and meet other criteria established in the TRO that will be discussed below. A Northern Telcom DMS500 switch that serves only customers on DS1 or higher loops "could" be used to provide analog POTS service to mass market customers, but unless it "is" doing so, and meets the other necessary criteria, the switch and the CLEC may not be counted as a trigger.

**Q. WITNESSES FOR BELLSOUTH CONCLUDE THAT TRIGGERS HAVE BEEN MET FOR SEVERAL MARKETS IN ALABAMA. ARE THERE CRITERIA IN THE TRO THAT THIS COMMISSION SHOULD APPLY IN THE ANALYSIS OF TRIGGER CANDIDATES?**

A. Yes. The direct testimony of CompSouth witness Joseph Gillan discusses six criteria found in the TRO that must be applied in the "self provisioning" trigger test:

> The self-provisioning trigger criteria can generally be organized into six categories. Before a "trigger candidate" can be found to qualify as satisfying the self-provisioning trigger, the criteria contained in the TRO for each of these categories must be satisfied. The six categories are as follows:
>
> 1. The self-provisioning trigger candidate's switches must be "mass market," not "enterprise" switches.

2. The self-provisioning trigger candidate must be actively providing voice service to mass market customers in the designated market, including residential customers, and is likely to continue to do so.

3. The self-provisioning trigger candidate should provide services exhibiting a ubiquity comparable to UNE-P within the area chosen for the analysis.

4. The self-provisioning trigger candidate should be relying on ILEC analog loops to connect the customer to its switch or, if a claimed "intermodal" alternative, its service must be comparable to the ILEC service in cost, quality, and maturity.

5. The self-provisioning trigger candidate may not be affiliated with the ILEC or other self-provisioning trigger candidates.

6. The existence of the self-provisioning trigger candidate should be evidence of sustainable and broad-scale mass market competitive alternatives in the designated market.

Only if each of these trigger criteria is met does a candidate qualify as one of the three self-provisioning providers necessary to satisfy the FCC's self-provisioning trigger. (Gillan Direct, pp. 37-39 – bullets in original replaced with numbers 1-6)

I will provide evidence that AT&T's actual deployment of local switches and network does not meet the TRO's requirements for criteria 1, 2 and 6, as more fully described by Mr. Gillan's direct testimony on pages 39 through 55.

**Q. PLEASE EXPLAIN HOW AT&T'S LOCAL SWITCH DOES NOT FULFILL THE CRITERION THAT THE SELF-PROVISIONING TRIGGER CANDIDATE'S SWITCHES MUST BE "MASS MARKET," NOT "ENTERPRISE," SWITCHES (CRITERION 1).**

A. As shown in the data table below, AT&T's switch is being used predominantly to serve enterprise customers. AT&T does not provide service to any residential customers from this switch, and all service being provided to very small business is

an artifact of a previous business plan which is no longer being pursued to provide service to new customers in Alabama. Given the economic and operational impairments associated with attempting to serve mass market customers using UNE-L, it is not AT&T's business plan to serve mass market customer from this switch and so it will remain an enterprise switch into the foreseeable future.

**Shaded cells contain Confidential Information**

| Switch Name | Switch CLLI | Number of voice grade equivalent lines (VGE) | Of VGE lines, number of DSO Lines | | Percent Enterprise | |
|---|---|---|---|---|---|---|
| | | | AT&T Records | ILEC Records | AT&T | ILEC |
| BIRMINGHAM | BRHMALPODS0 | | | | 95% | 96% |

**Shaded cells contain Confidential Information**

AT&T's local switch in Alabama serves a business customer universe that is at least 95% to 96% enterprise and should be excluded, as it is an enterprise switch and therefore does not meet the TRO trigger test criteria.

**Q. PLEASE EXPLAIN HOW AT&T'S LOCAL SWITCH DOES NOT FULFILL THE CRITERION THAT THE SELF-PROVISIONING TRIGGER CANDIDATE MUST BE ACTIVELY PROVIDING VOICE SERVICE TO MASS MARKET CUSTOMERS IN THE DESIGNATED MARKET, INCLUDING RESIDENTIAL CUSTOMERS, AND IS LIKELY TO CONTINUE TO DO SO (CRITERION 2).**

A. As discussed above, AT&T does not provide residential service using UNE-L. Further, AT&T is not actively providing service to very small businesses using UNE-

L and has no plans to do so in the foreseeable future. Thus, AT&T is not serving "the mass market" as defined by the TRO and is not an "active" provider of service even to the very small business segment of the mass market, and so does not meet the self-provisioning trigger criteria.

AT&T once had an active business plan to serve very small businesses using DS0 UNE-L loops, collocations, and our own local switches (which also served enterprise customers using DS1 and higher loops) in the 1999-2001 time period. That business plan did not materialize on a national basis, as well as here in Alabama, because of operational, economic, and other problems that were documented at the FCC in a Declaration filed by Ellycee Brenner. Citations in the TRO to the Brenner Declaration and the problems AT&T encountered may be found in paragraphs 437, 466 and 468 and their associated footnotes. The problems identified in the TRO, which included high losses of customers before they were even cut over and ineffective coordinated hot cuts, occurred regularly here in Alabama, leading to customer dissatisfaction and lower than expected financial returns, because of increased costs and other economic factors.

As a result, active provisioning of service to very small business using DS0 UNE-L loops ended in late 2001. During 2001, when the business plan was active, approximately 129 new lines were provisioned. In 2002 the number declined to approximately 72 and in 2003 declined further to approximately 60. The embedded base, remaining as an artifact of the old business plan, has declined to approximately **BEGIN CONFIDENTIAL ** [redacted] ** END CONFIDENTIAL**.

The lines being provisioned in 2002 and 2003 are not the result of an active business plan, but rather, reflect maintenance of existing very small business accounts already served via DS0 UNE-L, meeting the business needs of enterprise customers served on a DS1 level for "off lines" at the DSO level. These “off lines” are used to support facsimile machines, analog data modems, and the like.

In both cases, that is, adding new lines to existing customers and providing "off lines" to enterprise customers, the use of UNE-L rather than UNE-P avoids adding the administrative complexity of splitting the account between those lines provisioned on UNE-L and those lines provisioned on UNE-P. Alternatively, continuing to use UNE-L avoids the necessity to convert the entire account to UNE-P by arranging for and paying for a "reverse hot cut," which carries with it the very real probability of a disruption of service, and the need for the customer to reprogram all switched-based custom features and capabilities in place.

BellSouth’s own data about AT&T’s base of analog DSO loops in Alabama also demonstrates that AT&T is not an active provider of services to the mass market using UNE-L and its own switches. The data in the table below, prepared from BellSouth’s response to AT&T’s Interrogatory 115, shows that in the 18 months from May 2002, through November 2003, AT&T’s use of analog DS0 loops decreased by 17% in Alabama, and that the decrease was widespread, not concentrated in a single location or group of locations. They also show that AT&T’s ability to employ UNE-L to customers in individual ILEC end offices has been modest at best, and that it has never achieved a scale that would allow it to efficiently deploy, use and maintain the central office specific equipment that is necessary to collect and backhaul mass

market users' traffic to AT&T switches. This provides additional evidence that AT&T (and carriers in similar circumstances) would not likely be able to continue to provide UNE-L service even to small business customers.

**** Shaded cells contain Confidential Information ****

| | Market | CLLI | May 2002 | Nov 2003 | Percent Decrease |
|---|---|---|---|---|---|
| 1 | BIRMINGHAM Z1 | | | | 30% |
| 2 | | | | | +400% |
| 3 | | | | | 20% |
| 4 | | | | | 5% |
| | | | | | |
| | TOTALS | | | | 17% |

**** Shaded cells contain Confidential Information ****

In sum, AT&T's local switch in Alabama is being used to serve enterprise customers almost exclusively. AT&T does not use UNE-L to provide service to residential customers and uses UNE-L to provide service to a relatively few and declining number of very small business customers that are an artifact of a failed business plan[1].

**Q. PLEASE EXPLAIN HOW AT&T'S LOCAL SWITCH DOES NOT FULFILL THE CRITERION THAT THE EXISTENCE OF THE SELF-PROVISIONING TRIGGER CANDIDATE SHOULD BE EVIDENCE OF SUSTAINABLE AND BROAD-SCALE MASS MARKET COMPETITIVE ALTERNATIVES IN THE DESIGNATED MARKET (CRITERION 6).**

[1] There is one central office shown as having gained analog DS0 loops during this 18-month period. Collectively, the number of analog DS0 loops gained in these five offices was 25, or **Begin Confidential **** [redacted] **** End Confidential** of the embedded base of loops at the end of the period, versus a net loss of **Begin Confidential **** [redacted] **** End Confidential** loops, a "gain" that has no impact on the conclusion that AT&T does not actively provide service to mass market customers using UNE-L.

A. As explained above, AT&T does not serve the mass market using UNE-L and its own local switches, but rather serves enterprise customers. The small embedded base of very small business customers, totaling approximately **BEGIN CONFIDENTIAL ** [redacted] ** END CONFIDENTIAL** lines, exists only as an artifact of a failed business plan. AT&T has never served residential customers using UNE-L. There is no future plan to utilize UNE-L to serve the mass market due to the economic and operational impairments that continue to exist. Nothing about AT&T's presence in Alabama provides any evidence of sustainable and broad-scale mass market competitive alternatives in any market as defined by BellSouth.

## II.
## AT&T'S (AND OTHER CLECS') ACTUAL LOCAL SWITCH AND NETWORK DEPLOYMENT, SERVING THE MASS MARKET, HAS BEEN MISREPRESENTED IN THE ILEC'S DIRECT TESTIMONY.

**Q. BELLSOUTH'S WITNESS PAMELA A. TIPTON STATES THAT "CLECS HAVE DEPLOYED MORE THAN 40 SWITCHES IN ALABAMA, AT LEAST 8 OF WHICH ARE SERVING 'MASS MARKET' CUSTOMERS." SHE THEN PROVIDES EXHIBIT PAT-1 THAT SHE CLAIMS IS A LIST OF CLEC SWITCHES DEPLOYED IN ALABAMA. ARE HER STATEMENT AND EXHIBIT RELEVANT TO THE ISSUES IN THIS DOCKET AND ACCURATE RELATIVE TO EITHER AT&T OR CLEC MASS MARKET CAPABLE SWITCHES?**

A. No, the only switches relevant to this docket are CLEC switches that serve mass market customers. Nowhere in her testimony or its exhibits does Ms. Tipton identify

the "mass market" switches about which she writes or the wire centers to which they provide service. Thus, BellSouth does not present the kind of "objective" information that is necessary for the Commission to make a reasonable judgment as to whether the proposed trigger candidates should be counted when applying a trigger test.

In addition to the one (1) AT&T local switch discussed above, AT&T also operates two (2) toll switches in Alabama. Information regarding all three (3) of these switches, including which ones were capable of serving mass market customers, was provided to BellSouth in interrogatory responses and discussed with BellSouth in at least two informal meetings in which I personally participated. Despite having this information, BellSouth and Ms. Tipton cite the source for PAT-1 as the Local Exchange Routing Guide ("LERG"), a group of databases administered by Telcordia for the industry, the purpose of which is to provide routing information, not a count of switches.

PAT-1 includes data related to 47 "switches" that Ms. Tipton has apparently extracted from one (or more) of the LERG databases using some unidentified and inexplicable sorting criteria. While this might be the source for the claim of over 40 switches, PAT-1 does not identify which, if any, of these switches are serving mass market customers and thus provides misleading information to the Commission.

I lack sufficient knowledge of the other CLECs' switch deployments to determine specifically other examples of irrelevant data, but a scanning of the CLLI codes associated with other carriers indicates to me that several are likely present in PAT-1. It is impossible to determine from PAT-1 either the number of switches CLECs are operating in Alabama or the number of CLEC switches which are, or are not, serving

mass market customers. Ms. Tipton's and BellSouth's failure to provide relevant data in PAT-1, or to state the criteria they are using to gather and validate the data they present as factual is very disconcerting. Thus, any conclusions reached by Ms. Tipton regarding the number of CLEC switches in Alabama serving mass market customers are inaccurate and cannot be relied upon by the Commission in determining the outcome of this proceeding.

**Q. YOU STATED THAT AT&T OPERATES TWO TOLL SWITCHES IN THE STATE. WHY DID YOU INCLUDE THIS DATA AND HOW IS IT RELEVANT TO THE MASS MARKET SWITCHING SELF-PROVISIONING TEST OF THE TRO?**

A. I have included this data to be complete in my portrayal of AT&T's presence in Alabama and to demonstrate that these two (2) switches are, in fact, not capable of providing local service to mass market customers despite the fact that they provide a form of local service to large enterprise customers.

BellSouth is aware that these two (2) switches are used to provide a service known as AT&T Digital Link ("ADL") to enterprise customers that have their own on-site customer owned or customer provided switches, often referred to as Private Branch Exchange ("PBX") switches. Despite this knowledge, PAT-1 contains data related to AT&T's toll switches that misleadingly makes it appear that these switches provide local service to mass market customers.

The Commission may also remember discussions of ADL in other dockets. The customer's PBX provides all the classical "line side" functions to the customer's

telephone sets (dial tone, vertical features, etc.) and is connected to both the ILEC local and IXC long distance networks using "trunks," not "lines". Both the ILEC local switch and the IXC long distance switch treat the PBX switch as if it were another switch on their networks. As a long distance company, AT&T has long provided "special access" trunk connections between large enterprise PBX switches and our toll switches. After the passage of the Act, AT&T began offering these same customers the opportunity to reduce their overall telecommunications expenses by using their existing "special access" trunk connections to originate and terminate local traffic. Using this option, large enterprise customers are able to eliminate the vast majority of their PBX trunks to the ILEC.

Because a toll switch with ADL customers must terminate both toll and local traffic to an ADL customer's PBX, it is necessary for the toll switch and its Location Routing Number ("LRN") to appear in local portions of the LERG databases. Unfortunately, due to Telcordia's database design limitations, when this happens the same (toll) switch appears in the LERG with a different Common Language Location Identification ("CLLI") code than it has in the toll world. Toll switch CLLI codes typically end in three characters, --T[2]; however, the same switch, when listed in the local sections of the LERG, will have a CLLI that typically ends in DS-[3] . AT&T pointed this out to BellSouth in at least one informal discussion in which I participated and included the information in AT&T's response to BellSouth's Interrogatory 1. See Exhibit JMB-R1. Despite this knowledge, PAT-1 contains data

[2] For example, 01T, 03T.
[3] For example, DS3, DS6.

related to AT&T's toll switches that misleadingly makes it appear that these switches provide local service to mass market customers.

**Q. CAN THESE TWO TOLL SWITCHES BE MODIFIED TO SERVE MASS MARKET LOCAL CUSTOMERS?**

A. No. A more detailed explanation of why this is true is included in Exhibit JMB-R1. Briefly, these 2 switches are either 4ESS (which even BellSouth agrees cannot be so modified), or 5ESS and DMS "edge" switches that AT&T purchased with only a toll trunk switching capability. The "edge" switches do not have a "line," or "customer," side and cannot provide dial tone or vertical features. They are, like the 4ESS, purely trunk switching machines.

AT&T's two (2) toll switches, when used to provide the ADL product, are serving only large enterprise customers connected to the switches via high-capacity "special access" arrangements through long-term contracts. The switches are not, and cannot be, used to provide local service to mass market customers and are therefore not relevant to the TRO's mass market switching trigger tests.

BellSouth's inclusion of data about these switches in its triggers case, with full knowledge of their characteristics and limitations, skews its analysis, results in misleading conclusions, and renders the overall evaluation of its trigger case unreliable and incompetent for supporting a commission decision.

## III.
## KNOWLEDGE OF WHERE CLECS ARE ACTUALLY PROVIDING COMPETITIVE CHOICES TO CUSTOMERS THROUGH THE USE OF BOTH UNE-P AND UNE-L, IS VITAL TO THE COMMISSION'S TASKS IN THIS DOCKET.

**Q. ON PAGE 10 OF HIS TESTIMONY, BELLSOUTH WITNESS W. KEITH MILNER PROVIDES AN EXTRACT FROM THE TESTIMONY OF AN AT&T WITNESS IN DOCKET NO. 27889, APRIL 16, 2001. MR. MILNER CLAIMS THE EXTRACT IS A DEMONSTRATION OF "CLEC NETWORK ARCHITECTURAL CONSIDERATIONS," STATES THAT CLEC NETWORKS ARE "NOT CONFIGURED LIKE BELLSOUTH'S", "RELYING ON FEWER SWITCHES AND MORE TRANSPORT." IS THE TESTIMONY MR. MILNER HAS SELECTED DESCRIPTIVE OF HOW AT&T (OR ANY OTHER CLEC) MAKES DECISIONS ABOUT WHEN, WHERE, AND HOW TO DEPLOY ITS NETWORK TO SERVE CUSTOMERS?**

A. No. The issue being discussed in AT&T's Arbitration in April, 2001, was the rate BellSouth should pay AT&T when BellSouth terminated calls to one of AT&T's switches. (See Exhibit JMB-R2 for a more complete extract showing the context in which this testimony was presented.) AT&T's position that the "tandem rate" should apply was ultimately upheld. The purpose of the testimony Mr. Milner has selected was to demonstrate that the potential coverage of AT&T's switches was comparable to that of a BellSouth tandem switch – a requirement for eligibility to receive the tandem rate. It does not address the process or factors used in determining if it is economic to deploy network equipment to actually serve the customers based upon where they are located relative to the ILEC's legacy network. The statement that "AT&T has the ability to connect…" does not provide any information about how AT&T, or any other CLEC, determines whether it is economic to make such connections. Therefore, I believe Mr. Milner misses the mark on a very important

issue that must be determined at this hearing.

As I indicated in my direct testimony, a crucial issue in this proceeding is not whether a CLEC simply "can" connect its switch with the local loops of the end user, but whether a CLEC can "efficiently use" its own switch to connect to the local loops of end users. In contrast, the issue being discussed in the testimony Mr. Milner has selected was geographic comparability not the actual deployment of network facilities to serve customers.

**Q. IN MR. MILNER'S DIRECT TESTIMONY HE PRESENTS INFORMATION ABOUT THE OPTIONS BELLSOUTH SAYS ARE AVAILABLE TO CLECS IN BUILDING NETWORKS TO SERVE MASS MARKET CUSTOMERS USED IN THE BELLSOUTH ANALYSIS OF COMPETITIVE ENTRY ("BACE") MODEL. IN YOUR DIRECT TESTIMONY YOU CONTRAST ILEC AND CLEC NETWORKS. DO ANY DIFFERENCES IN HOW THE TWO OF YOU DESCRIBE CLEC NETWORKS IMPACT YOUR CONCLUSIONS THAT CLECS ARE IMPAIRED BY THE ILEC'S LEGACY NETWORK ARCHITECTURE?**

A. No. We both agree that CLEC networks are not configured like BellSouth's and that CLECs must rely on fewer switches and more transport than BellSouth. Mr. Milner's testimony describing the network architecture assumptions underlying the BACE model is sufficiently generic as to be non-controversial. However, a number of other BellSouth witnesses point to Mr. Milner's testimony and to the extract from AT&T's Arbitration testimony in 2000 to support some particularly outlandish

positions.

Each of the three "Network Construct" options Mr. Milner describes in his testimony explains how customers served from an ILEC central office (or wire center) are connected to the CLEC's switch using either EELs and collocations or collocations alone. In each option he describes the central office or wire center serving the customer's loop as the starting point of the analysis. The customer's wire center is essential to the "Network Construct" and the process of determining whether it is economic to serve customers in that wire center. This central role for the wire center is also noted in the testimony of BellSouth's witnesses James Stegeman and Dr. Debra Aron, and throughout Mr. Stegeman's exhibits on BACE. However, despite the testimony of witnesses Milner, Stegeman and Aron, two other BellSouth witnesses make the outlandish claims that the wire center concept has no meaning and that where the customer is located is unnecessary information in determining whether CLECs can use their own switching facilities to economically and efficiently serve mass market customers.

**Q. WHICH OTHER BELLSOUTH WITNESSES MAKE THE CLAIM THAT THE WIRE CENTER HAS NO MEANING?**

A. Dr. Christopher Jon Pleatsikas and Ms. Pamela A. Tipton.

**Q. PLEASE DISCUSS DR. PLEATSIKAS' CLAIM.**

A. Citing to the hearing transcript in an AT&T arbitration in Florida (FPSC Docket 0007321-TP, Tr. at page 94), similar to the one in Alabama cited by Mr. Milner

above, Dr. Pleatsikas concludes his testimony as follows:

> Therefore, the wire center concept is not relevant to market definition in this context, and **specifically not economically relevant in terms of how CLECs provision services to their end users**. The geographic scope of the service offered is limited in part by the CLEC's ability to economically serve those customers using the CLECs' network design, not by the location or span of BellSouth's wire centers. (Pleatsikas Direct, Page 13, lines 1-6. Emphasis added.)

Dr. Pleatsikas' testimony is designed to support the concept of defining the mass market to be Component Economic Areas ("CEA") divided by UNE Zones, but his statements about wire centers not being relevant to determining whether that market definition is valid, or in determining whether it is economic for CLECs to serve customers in a given wire center, are misleading and have the potential of defining a market in such a manner that only certain customers will have competitive choices. If a wire center, included in a market as defined by Dr. Pleatsikas, cannot be economically and efficiently served by any CLEC using its own switching facilities, the mass market customers in that wire center having a competitive choice through CLECs' use of UNE-P will lose that choice, and be able to obtain POTS only from the ILEC.

Language in the TRO, at ¶ 501, ¶ 517 and ¶ 520, supports the logical proposition that for impairment to be found non-existent, competition must exist throughout the whole market, not only in portions of the market.

In his direct testimony, CompSouth witness Joseph Gillan discusses the concept of "ubiquity" (pages 47-48), and in their rebuttal testimonies, CompSouth witnesses Don J. Wood and Joseph Gillan discuss other aspects, concepts and tools the Commission

should use to evaluate whether impairment no longer exists ubiquitously across a defined market area from the wire center level up.

**Q. DOES COMPETITION FOR MASS MARKET POTS CUSTOMERS CURRENTLY EXIST IN EVERY ALABAMA BELLSOUTH WIRE CENTER?**

A. Yes. The evidence in this docket clearly demonstrates that one or more CLECs, using UNE-P, provide service to customers in every BellSouth wire center within the "markets" in which they claim impairment does not exist. Therefore, in testing any BellSouth market definition, the Commission must assure itself that UNE-L competition will exist in every wire center. Any lesser result means that the Commission will be making an affirmative decision to deny competitive choice to customers who have it today and ignoring the real economic and operational impairment faced by CLECs.

**Q. PLEASE DISCUSS MS. TIPTON'S CLAIM THAT THE LOCATION OF CUSTOMERS IN A MARKET IS IRRELEVANT.**

A. On pages 13-14 of her direct testimony Ms. Tipton, referencing Mr. Milner's testimony discussed above, reaches the following incorrect conclusion about the need to provide more specific information regarding locations of CLEC customers served via UNE-L:

> Given that, the actual physical location of the individual end users in each market area is not relevant. If the CLECs have chosen to serve customers in BellSouth's serving areas, according to the CLECs, their switch can serve any customers in those areas. (Tipton direct, page 13, line 23 to page 14, line 4.)

"Are," "can" and "can economically," represent three different concepts, only two of which, "are" and "can economically," have relevance to the task before this Commission as a result of the TRO. The "trigger" tests are concerned with "are" -

what competitive choices actually exist and where they exist, as a result of the implementation of both UNE-P and UNE-L. The "potential deployment" test is concerned with "can economically" and, as is noted in the testimony of BellSouth's witnesses Milner, Stegeman and Aron, BellSouth incorporates where by basing its analysis on a wire center focused analysis.

Ms. Tipton's claim that customer location is not relevant to her trigger analysis denies the Commission knowledge of the actual data it needs, both to determine whether impairment has ceased to exist in any given market and to protect mass market customers who currently have competitive choices. AT&T served BellSouth with discovery in an attempt to obtain this necessary information. Analysis of the data in BellSouth's response to AT&T's Interrogatory 115 reveals that facilities based mass market competition is present in only 26 (18%) of BellSouth's 145 Alabama wire centers. In many of the 26 wire centers, fewer than 3 CLECs are actually present.

**Q. WHY IS DATA ABOUT WHICH WIRE CENTERS ARE BEING SERVED BY CLECS USING UNE-L VITAL TO THE COMMISSION'S TASK?**

A. As I noted above, customers located in 100% of BellSouth's wire centers, in the "markets" in which BellSouth is seeking relief, have competitive choices today through one or more CLECs offering service using UNE-P. That simply is not the case for UNE-L. For example, AT&T offers service using UNE-L in only **BEGIN CONFIDENTIAL ** [redacted] ** END CONFIDENTIAL** of the 145 BellSouth wire centers in Alabama. To my knowledge, there is no combination of CLECs that results in 100% coverage of BellSouth's wire centers using UNE-L. BellSouth's

answer to AT&T's Interrogatory No. 89 states that there are no collocation arrangements in 92 of its Alabama wire centers and their response to AT&T's Interrogatory No. 10 reveals that BellSouth has never performed a hot cut in 101 of its Alabama wire centers. As noted above, there is no facilities based competition in 82% of BellSouth's Alabama wire centers.

Based on triggers, a finding that impairment does not exist in a market that contains one or more of these wire centers means that customers who currently have competitive choices for local service, by way of UNE-P, will lose those choices. Such a result is inconsistent with the Act and the TRO, as discussed by CompSouth witness Joseph Gillan, and would be a Type 1 error of the type described in the testimony of MCI witness Dr. Mark T. Bryant, i.e., a finding that CLECs without access to unbundled switching are not impaired when, in fact, they are impaired.

## IV.
## THE CLECS ABILITY TO BENEFIT BY PROVISIONING DSL SERVICES TO IT CUSTOMERS IN ALABAMA IS OVERSTATED BY BELLSOUTH'S ASSUMPTIONS.

**Q. IN YOUR DIRECT TESTIMONY (PAGE 39), YOU CONTRASTED THE CLECS' AND ILECS' ABILITIES TO PROVIDE DSL SERVICES TO CUSTOMERS. HOW DOES BELLSOUTH ADDRESS THIS IN ITS DIRECT TESTIMONY?**

A. Mr. Milner recognizes that limitations exist, without being specific as to what the limitations are. "By choosing this configuration, the CLEC also gives itself access to more loops composed entirely of copper facilities, thus enlarging its Digital Subscriber Line ("DSL") footprint…" (Milner Direct, page 5, lines 10-12) In

contrast, Dr. Aron's assumptions about CLEC DSL penetration in her Exhibit DJA-05, and thus in the BACE model, do not reflect any consideration of these limitations. For residential customers, Dr. Aron assumes a 5% penetration rate in year one, leaping to 15% in year three. For the small office, home office ("SOHO") customer, she assumes an astounding 10% penetration in year one, leaping to 25% in year three. To place these assumptions in perspective, BellSouth's current penetration rate for its retail FastAccess Service is approximately 6% after being in the market since 1998.

CLECs using UNE-L can only offer DSL service to those customers to whom it can obtain an all copper loop of less than 18,000 feet free of any defects that disqualify it for DSL service. The data provided by BellSouth in its response to AT&T's Interrogatory No. 25 reveals that only 64% of BellSouth's loops in Alabama are all copper; however, as I noted in my Direct Testimony, it is likely that BellSouth can provide its retail FastAccess Service to over 86% of its customers. Therefore, at best, CLECs in Alabama using UNE-L have approximately two-thirds the capability to provide DSL service to customers as BellSouth.

The actual percentage of all copper loops will obviously vary by wire center, but Dr. Aron's assumptions need to be revised to reflect reality before being used in any BACE analysis.

Overstated assumptions about product penetrations will generate overstated revenues and result in false determinations that entry in a given market is economically possible.

**V.**

## IMPAIRMENT CAUSED BY EXISTING LEGACY NETWORK TECHNOLOGY CANNOT BE CURED BY IMPROVEMENTS TO THE HOT CUT PROCESS – BATCH, BULK, OR ROLLING

**Q. IN HIS TESTIMONY ON PAGE 15, LINE 21 TO PAGE 16, LINE 10, BELLSOUTH WITNESS MR. RUSCILLI SUGGESTS THAT ONE OF THE KEY REASONS BELLSOUTH HAS DEVOTED SO MUCH OF ITS DIRECT TESTIMONY TO HOT CUTS IS BECAUSE IT EXPECTS CERTAIN CLECS, AND SPECIFICALLY AT&T, TO ADVANCE THE ARGUMENT THAT NO ADEQUATE HOT CUT PROCESS IS POSSIBLE USING EXISTING TECHNOLOGY, AND FURTHER, THAT THE FCC "REJECTED AT&T'S PROPOSAL" FOR ELECTRONIC LOOP PROVISIONING ("ELP") IN THE TRO. DID THE FCC "REJECT" AT&T'S ELP PROPOSAL?**

A. No. The FCC's substantive discussion of ELP occurred in a single paragraph of the TRO (491) that ended as follows:

> Given our conclusions above, we decline to require ELP at this time, although we may reexamine AT&T's proposal if hot cut processes are not, in fact, sufficient to handle necessary volumes. (TRO ¶ 491)

The FCC did not reject ELP, it reserved the right to consider requiring it in the future.

**Q. IS AT&T PROPOSING THAT THIS COMMISSION ORDER THE IMPLEMENTATION OF ELP AS A RESULT OF ITS DELIBERATIONS IN THIS DOCKET?**

A. No. That is not the purpose of this docket, nor is ELP an issue in this docket. However, AT&T believes that, as a result of this docket, the Commission will find that, without access to unbundled local switching and UNE-P, the CLECs are impaired, just as the FCC determined. The FCC based its determination solely on the

issues it found in the evidence before it relating to the ineffectiveness of the hot cut process. The FCC noted that there were likely other causes of impairment (operational and economic) in addition to hot cuts and charged state regulators, like this Commission, to investigate those in the "nine month" proceedings at the same time the states validated the finding of impairment resulting from the hot cut process. AT&T firmly believes this Commission will find that impairment in Alabama is widespread and results not only from hot cuts, but also from a number of operational and economic factors directly related to the limitations of the existing legacy technology. AT&T's ELP proposal directly attacks all of the technology limitations and, therefore, has the potential to eliminate impairment economically and effectively.

The Commission should open a separate docket to address how to eliminate the impairment it will find here. It is in that docket that ELP and any other proposals with potential to eliminate impairment should be considered.

AT&T's discussion of ELP in this docket in no way complicates or obscures this Commission's task in investigating the impairments CLECs face in Alabama. Rather, it demonstrates that the impairment we are confident the Commission will find can be cured through an industry effort similar to that which was required to remove the impairments to competition in the long distance market through the implementation of equal access.

As I pointed out in my direct testimony, the technology and equipment necessary to implement ELP are available today and are being deployed and used by the ILECs in

association with their deployment of DSL services. (Direct, page 46.)

## VI.
## CONCLUSION

**Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.**

A. Contrary to BellSouth's assertions, AT&T's use of its local switches and network in Alabama does not meet the requirements of the TRO for AT&T to be identified as a trigger in any BellSouth defined market. AT&T does not provide any mass market residential service. AT&T's universe of business customers served is 95% enterprise. The small number of very small business customers being served is an artifact of a prior failed business plan that will not be revived and that is not being used to provide service to new very small business customers. AT&T is not actively provisioning UNE-L service to very small business customers.

BellSouth has misrepresented the CLECs' actual deployment of local switches and networks in its direct testimony and failed to provide the Commission with the data to support BellSouth's claims.

BellSouth has compounded its failure to provide the data to support its claims by improperly asserting that the location of customers being served by both UNE-P and UNE-L, but particularly UNE-L, is irrelevant. Knowing where competition exists today using UNE-P, but would not exist in the future if UNE-P were made unavailable, is critical to the Commission's requirement to foster the on-going development and preservation of competition for local service.

BellSouth has overstated assumptions about the CLECs' ability to provide DSL services in a manner that may lead to the erroneous determination that entry in a given market is economically possible.

The impairment caused by the existing legacy network technology cannot be cured by improvements to the hot cut process, be they "batch", "bulk", or "rolling" processes. AT&T's Electronic Loop Provisioning proposal is capable of curing these deficiencies, but curing the continuing impairment that AT&T believes the Commission will find exists is not an issue in this proceeding. The Commission should open a separate docket to address how to eliminate the impairment it will find in this docket.

**Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

A. Yes, at this time.

REQUEST: BellSouth First Set of Interrogatories

DATED: October 24, 2003

Interrogatory 1: Identify each switch owned by AT&T that AT&T uses to provide a qualifying service anywhere in Alabama, irrespective of whether the switch itself is located in the state and regardless of the type of switch (e.g., circuit switch, packet switch, soft switch, host switch, remote switch.)

Response: To the extent that the definitions of "qualifying service" and "non-qualifying service" as defined by BellSouth in BellSouth's First Set of Interrogatories to AT&T are different than the definitions of "qualifying" and "non-qualifying" service as defined in 47 C.F.R. § 51.5, this interrogatory is vague. Specifically, 47 C.F.R. § 51.5 defines a "qualifying service" as "a telecommunications service that competes with a telecommunications service that has been traditionally the exclusive or primary domain of incumbent local exchange carriers ("ILECs"), including, but not limited to, local exchange service, such as plain old telephone service ("POTS"), and access services, such as digital subscriber line services and high capacity circuits." "Non-qualifying services" are defined as services that are "not qualifying service[s]." Id. Subject to the foregoing, and without waiving any objection, AT&T will construe the terms contained in this interrogatory, and all other interrogatories, in accordance with 47 C.F.R. § 51.5 and applicable law and consider all traditional local telecommunications service as a "qualifying" service and all traditional long distance service as "non-qualifying" service.

Subject to the foregoing see Confidential Attachments 1a and 1b. These attachments provide information on two categories of switches used (and owned) by AT&T. The first category consists of "Class 5" switches.

The second category consists of switches used (and owned) by AT&T to provide AT&T Digital Link Service ("ADL") to enterprise using "Class 4" and "Class 5 edge" long-distance switches. ADL is not a stand-alone local product but rather one that allows large enterprise AT&T long distance customers to add local voice traffic to their dedicated facilities that handle voice

and data transmission. This permits customers to maximize efficiency by using the same trunks for local, intraLATA, long distance and international calls. Customers that subscribe to ADL service use a DS1 or higher level facility and must also employ sophisticated customer premises equipment on their premises. The switches are not capable of providing service to mass market customers because they do not have the necessary connectivity (i.e., line-side analog ports), functionality (e.g., vertical features like call waiting and call forwarding), and network interconnection, including connection to Public Safety Answering Points. AT&T does not use unbundled network elements to provide ADL service.

The ADL capable (enterprise) switches identified in Attachment 1b are identified by their toll switch CLLI codes, which end in a "T". In the LERG these same switches appear using a psuedo CLLI code ending in "DS_" because the LERG will not accept the "T" code for a switch identified as having "end office functions" and having a "LRN".

The "Class 5 edge" long distance switches are either Lucent 5ESS or Nortel DMS switches. Both of these switch types are common in ILEC local networks. However, the switches used in the ILEC network to provide local services and the edge long distance switches in AT&T's network perform totally different functions.

Converting the edge switches to provide local services would require extensive hardware modifications, software modifications, and E911 Connectivity, as well as supporting OSS modifications and connectivity. As a practical matter, the modifications required preclude conversion of these switches.

For Example: The 5ESS and DMS would need to be completely rebuilt/retrofitted to support local services. Only the basic 5ESS and DMS platform (equipment racks, containers/cabinets, and some switch modules) could be reused. Modifications would include, but not limited to the following:

- OSS modifications (including loading of databases) and Connectivity to support Fault, Configuration, Account, Performance, and Security (FCAPS) Management, and other Operations, Administration,

Maintenance, and Provisioning (OAM&P) processes (e.g., LIDB and ISCP).

- Software and Switch Memory Upgrades (and additional RTU Licenses) to support the Vertical Features required to provide local service.
- Line Side Peripheral Hardware Upgrades to support local services.
- E911 Connectivity and Support.
- AIN support (software and connectivity) to support IN Triggers.
- Announcement System (Hardware, Software, and Transport Facilities).
- 105 Test Line Responder Units (Hardware & Software)
- Test Buss Control Unit (TBCU) to support MLT type loop testing functions (Hardware)
- Additional Facilities and Interfaces (Hardware) required for DCS and SONET Connectivity to the Network.
- Building of ODD (Office Dependent Data) which is unique to each switch and relates to translations (lines) and parameters (equipment) which consists of information related to switch owner (line, trunk, routing, charging, equal access, BRCS) and/or the office equipment (quantity, configuration, equipage). This makes up the office database.

Provided by: Jay Bradbury

**BEFORE THE ALABAMA PUBLIC SERVICE COMMISSION**

**DIRECT TESTIMONY OF RICHARD T. GUEPE**

**ON BEHALF OF**

**AT&T COMMUNICATIONS OF THE SOUTH CENTRAL STATES, INC.**

**AND TCG MIDSOUTH**

**DOCKET NO. 27889**

**APRIL 16, 2001**

BellSouth's interconnection traffic to be transitioned from any existing POI in jeopardized AT&T collocation space to a new POI. The Commission should adopt AT&T's network interconnection solution, because, otherwise, consumers served by a BellSouth end office for which AT&T's collocation space is exhausted would not enjoy the same level of local exchange competition as customers in unaffected areas.

**5. AT&T's solution is consistent with law and regulation.**

The FCC has made clear that ILECs do not have the right to determine where CLECS must interconnect to pick up ILEC traffic. CLECs can interconnect at any technically feasible point, and can select a point that is most efficient to lower costs. AT&T's proposal clearly meets these requirements.

**ISSUE 9: SHOULD AT&T BE PERMITTED TO CHARGE TANDEM RATE ELEMENTS WHEN ITS SWITCH SERVES A GEOGRAPHIC AREA COMPARABLE TO THAT SERVED BY BELLSOUTH'S TANDEM SWITCH?**

**Q. WHAT DO THE FCC REGULATIONS PROVIDE ABOUT CLEC SWITCHES AND TANDEM RATES?**

A. The FCC recognizes that there is parity between a competitive carrier's switch and an ILEC tandem switch. The FCC regulations, 47 C.F.R. § 51.711 (a)(3), provide:

> Where the switch of a carrier other than an incumbent LEC serves a geographic area comparable to the area served by the incumbent LEC's tandem switch, the appropriate rate

for the carrier other than an incumbent LEC is the incumbent LEC's tandem interconnection rate.

**Q. HAS THE FCC PROVIDED ANY ADDITIONAL GUIDANCE REGARDING THE ESTABLISHMENT OF TRANSPORT AND TERMINATION RATES?**

A. Yes, it has. In the Local Competition Order, the FCC stated:

> We find that the "additional costs" incurred by a LEC when transporting and terminating a call that originated on a competing carrier's network are likely to vary depending on whether tandem switching is involved. We, therefore, conclude that states may establish transport and termination rates in the arbitration process that vary according to whether the traffic is routed through a tandem switch or directly to the end-office switch. In such event, states shall also consider whether new technologies (*e.g.*, fiber ring or wireless networks) perform functions similar to those performed by an incumbent LEC's tandem switch and thus, whether some or all calls terminating on the new entrant's network should be priced the same as the sum of transport and termination via the incumbent LEC's tandem switch. Where the interconnecting carrier's switch serves a geographic area comparable to that served by the incumbent LEC's tandem switch, the appropriate proxy for the interconnecting carrier's additional costs is the LEC tandem interconnection rate.[17]

**Q. DO AT&T'S SWITCHES IN ALABAMA COVER A GEOGRAPHIC AREA COMPARABLE TO THE AREA COVERED BY BELLSOUTH SWITCHES?**

A. Yes. AT&T offers local exchange service in Alabama via 4ESS switches, which function primarily as long distance switches, and 5ESS switches.

AT&T has the ability to connect virtually any qualifying local exchange customer in Alabama to one of these switches through AT&T's dedicated access services.

AT&T requests that the Commission order BellSouth to pay AT&T BellSouth's tandem interconnection rate for the termination of local traffic at any AT&T switch. AT&T is justified in its request because the geographic area covered by each switch is comparable to the area covered by BellSouth's tandem switches.

**Q. HAVE YOU PREPARED ANY MATERIALS THAT WILL ASSIST THE COMMISSION IN DETERMINING THE GEOGRAPHIC COVERAGE OF AT&T'S SWITCHES SERVING ALABAMA?**

A. To assist the Commission in understanding this issue, I have prepared two maps that are marked as Exhibits RTG-6a, 6b and 6c. Exhibits RTG-6a, 6b and 6c contain both color transparency maps and color copies of the same maps. The transparent maps are supplied so that the reader can "overlay" the maps and compare the geographic area served by AT&T and TCG switches and BellSouth switches.

Exhibits RTG-6a[18] and 6b provide the number of switches AT&T and TCG currently operate in Alabama on a LATA by LATA basis. It is important to

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[17] FCC Local Competition Order at ¶ 1090 (emphasis added).

[18] On the AT&T maps, green shading depicts the areas covered by AT&T's switches.